

Amendment

Please amend the above-identified patent application as follows:

In the Claims:

Please amend the claims as follows. The following listing replaces all prior versions and listings of claims in the application:

Claim Listing:

- 1 1. (currently amended) A system for adjusting ~~the trim~~ a trim device associated with a
2 control surface in an aircraft, said aircraft having a primary control system; said system
3 for adjusting the trim device comprising:
4 a control servo coupled to said primary control system through a coupling
5 device;
6 a first trim sensor within said coupling device, said first trim sensor
7 producing a first trim signal responsive to a control force transmitted through said
8 coupling device;
9 a trim servo responsive to said first trim signal for adjusting said trim device
10 position in accordance with said first trim signal.
- 1 2. (currently amended) A system as in ~~claim 1~~ claim 1, wherein said coupling device is a
2 link comprises a link.
- 1 3. (canceled)
- 1 4. (currently amended) A system as in ~~claim 3~~ claim 2, wherein said link is comprises a
2 push-pull rod.

- 1 5. (currently amended) A system as in ~~claim 3~~ claim 2, wherein said first trim sensor
2 comprises:
3 a flexible portion having a flexing response to said control force ~~transmitted~~
4 ~~through said link~~;
5 a flexing response sensor producing a ~~trim~~ said first trim signal responsive to
6 said flexing response of said flexible portion.
- 1 6. (currently amended) A system as in ~~claim 5~~ claim 5, wherein said flexible portion
2 produces a rotational response to said control force ~~transmitted through said link~~.
- 1 7. (currently amended) A system as in ~~claim 5~~ claim 5, ~~having~~ wherein said first trim
2 sensor includes a portion disposed transverse to the force transmitted through said
3 coupling device, said transverse portion coupled to said flexible portion and responsive to
4 said flexing response, and said flexing response sensor coupled to said transverse portion.
- 1 8. (currently amended) A system as in ~~claim 5~~ claim 5, wherein the flexing response
2 sensor ~~is an~~ comprises at least one optical sensor.
- 1 9. (withdrawn) A system as in ~~claim 8~~ claim 8, wherein the flexing response sensor
2 includes two optical sensors spaced apart to generate a response dead zone.
- 1 10. (withdrawn) A system as in ~~claim 5~~ claim 5, wherein the flexing response sensor
2 includes a switch.
- 1 11. (withdrawn) A system as in ~~claim 2~~ claim 2, wherein said first trim sensor includes a
2 switch.
- 1 12. (currently amended) A system as in ~~claim 2~~ claim 2, wherein said first trim signal
2 includes a response portion that is proportional to ~~the force to be measured~~ said control
3 force.

- 1 13. (withdrawn) A system as in ~~claim 2~~ claim 2, wherein said first trim signal includes a
2 response portion having hysteresis.
- 1 14. (withdrawn) A system as in ~~claim 2~~ claim 2, wherein ~~said~~ said first trim signal
2 includes a response portion having a dead zone.
- 1 15. (currently amended) A system as in ~~claim 2~~ claim 2, wherein said link is coupled to a
2 primary control cable.
- 1 16. (currently amended) A system as in ~~claim 15~~ claim 15, wherein said link is coupled
2 through a cable attaching device comprising a bar.
- 1 17. (currently amended) A system as in ~~claim 2~~ claim 1, further including a second trim
2 sensor, said second trim sensor producing a second trim signal; said trim servo being
3 responsive to said second trim ~~signal~~, signal; wherein said first trim sensor and said
4 second trim sensor are separate and independent.
- 1 18. (currently amended) A system as in ~~claim 17~~ claim 17, wherein said trim servo
2 adjusts said trim device ~~position~~ only when said first trim sensor and said second trim
3 sensor agree in direction.
- 1 19. (withdrawn) A system as in ~~claim 17~~ claim 17, wherein said second trim sensor is
2 included in said coupling device.
- 1 20. (currently amended) A system as in ~~claim 17~~ claim 17, wherein said second trim
2 sensor is included in said control servo.
- 1 21. (withdrawn) A system as in ~~claim 20~~ claim 20, wherein said second trim sensor is an
2 electronic sensor.

- 1 22. (currently amended) A system as in ~~claim 17~~ claim 17, wherein said second trim
2 sensor is ~~electromechanical~~ an electromechanical sensor.
- 1 23. (withdrawn) A system as in ~~claim 17~~ claim 17, wherein one of said first trim sensor
2 or said second trim sensor provides direction information ~~only~~.
- 1 24. (withdrawn) A system as in ~~claim 23~~ claim 23, wherein one of said first trim sensor
2 or said second trim sensor includes a switch.
- 1 25. (currently amended) A system as in ~~claim 2~~ claim 1, including a first trim controller;
2 said first trim controller responsive to said first trim sensor, and said trim servo
3 responsive to said first trim controller.
- 1 26. (currently amended) A system as in ~~claim 25~~ claim 25, wherein said first trim
2 controller provides a pulsed output to drive said trim servo.
- 1 27. (currently amended) A system as in ~~claim 25~~ claim 25, wherein said first trim
2 controller is responsive ~~only~~ to the polarity of said first trim signal.
- 1 28. (withdrawn) A system as in ~~claim 25~~ claim 25, wherein said first trim controller
2 includes a hysteresis response to said first trim signal.
- 1 29. (withdrawn) A system as in ~~claim 25~~ claim 25, wherein said first trim controller
2 includes a dead zone response to said first trim signal.
- 1 30. (currently amended) A system as in ~~claim 25~~ claim 25, wherein said first trim
2 controller provides an output proportional to said first trim signal.
- 1 31. (currently amended) A system as in ~~claim 30~~ claim 30, wherein said first trim
2 controller output is a pulsed output having a variable duty cycle wherein the variable duty
3 cycle is proportional to said first trim signal.

1 32. (withdrawn) A system as in ~~claim 25~~ claim 25, further including a signal from an
2 autopilot wherein ~~said first trim controller is responsive to said autopilot signal and said~~
3 first trim controller adjusts the trim device only when said autopilot signal is present.

1 33. (currently amended) A system for adjusting ~~the trim~~ a trim device for a control
2 surface comprising:
3 a first trim sensor responsive to the control force acting on said control
4 surface;
5 a second trim sensor responsive to the control force acting on said control
6 surface, said second trim sensor separate and independent from said first trim sensor;
7 a trim servo responsive to said first trim sensor and said second trim sensor;
8 wherein said trim servo adjusts said trim device only when said first trim sensor and said
9 second trim sensor agree in direction.

1 34. (currently amended) A method for adjusting ~~the trim~~ a trim device associated with a
2 control surface comprising the steps of:
3 Generating a first trim signal using a first trim sensor;
4 Generating a second trim signal using a second trim sensor, wherein said second
5 trim sensor is separate and independent from said first trim sensor with respect to ~~failure~~
6 ~~modes~~ a failure mode;
7 Adjusting said trim device only when said first trim signal and said second trim
8 signal agree in direction.
9

Claims 1, 2, 4-8, 12, 15-18, 20, 22, 25-27, 30, 31, 33, and 34 are elected as readable on this species.

Claims 9 -11, 13, 14, 19, 21, 23, 24, 28, 29, and 32 are withdrawn.

Claim 3 has been canceled.

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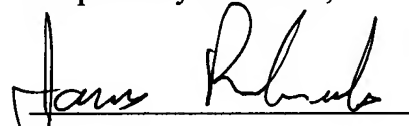
Conclusion

Applicant believes the claims are now in condition for examination on the merits and respectfully requests such action.

10 If the Examiner believes, for any reasons, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

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